



GRAIN TRANSPORTATION REPORT

Transportation & Marketing, Agricultural Marketing Service
United States Department of Agriculture

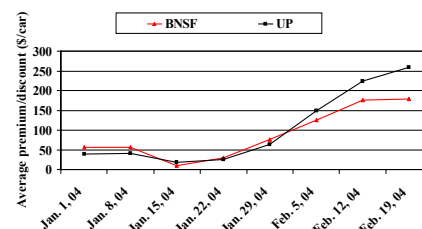
FEBRUARY 19, 2004

TM GRAIN TRANSPORT					
COST INDICATORS*					
	Truck	Rail	Barge	Ocean	
				Gulf	Pacific
02/18/04	106	314	101	308	310
Compared with Last Week	↑	↑	↓	↓	↓
*Indicator: Base year 2000=100; Weekly updates include Truck=diesel; Rail=nearby secondary rail market; Barge=spot Illinois River Basis; Ocean vessel based on routes to Japan					

Record Corn Prices Spur Demand for Railcars. A sharp increase in the premiums paid for guaranteed delivery of covered-hopper railcars in March, April, and May appears to be primarily the result of the highest farm-gate prices for corn in 6 years. Guaranteed cars in the secondary railcar market for delivery during March are trading at \$179 on Burlington Northern Santa Fe Railway (BNSF) and \$259 on the Union Pacific Railroad (UP), compared with only \$10 and \$18, respectively, on January 15 (table 5 in the rail section)(figure 1). Guaranteed cars for delivery during April are trading at \$85 on BNSF and \$163 on UP (table 5 in the rail section)(figure 2). Abnormally high prices in the secondary railcar markets indicate that the demand for rail transportation of corn could be unusually high this Spring.

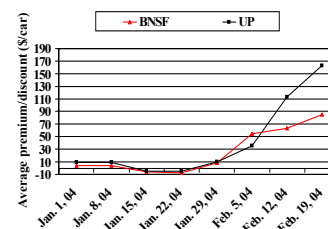
High Bid Prices Also Indicate Expected Constraints in Rail Capacity. Grain train speeds on both UP and BNSF have been slower than normal this Fall and Winter mainly due to export volumes and crew shortages. UP grain train speeds in January 2004 were 14 percent slower than in January 2003, whereas BNSF grain train speeds were 10 percent slower (figure 3). Slower train speeds result in longer cycle times for the rail cars, reducing the number of loads each railcar can carry during a given period. The higher bid prices on UP indicate that the market expects greater capacity shortages this Spring on UP than on BNSF. Although both BNSF and UP have suffered weather-related slowdowns this Winter, these slowdowns are unlikely to greatly affect rail capacity this Spring. Marvin.Prater@usda.gov

Figure 1: Secondary railcar market – bids for delivery in March 2004



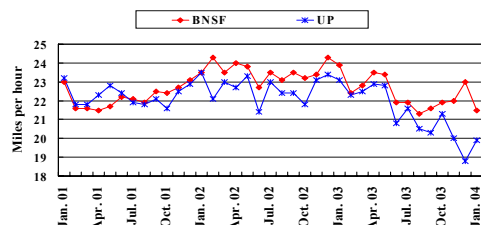
Sources: James B. Joiner & Co.; Tradewest Brokerage Co.

Figure 2: Secondary railcar market – bids for delivery in April 2004



Sources: James B. Joiner & Co.; Tradewest Brokerage Co.

Figure 3: Average speed, grain trains



Source: Association of American Railroads, Railroad Performance Measures.

Report is prepared by Deen Olowolayemo, Johnny Hill, Karla Martin and Delmy Salin, Agricultural Economists, Transportation & Marketing, Agricultural Marketing Service, USDA (202) 690-1304. Support provided by Upper Great Plains Transportation Institute, North Dakota State University. This report can be found on the Internet at www.ams.usda.gov/tmd/grain.htm. E-mail comments and questions to Surajudeen.Olowolayemo@usda.gov.

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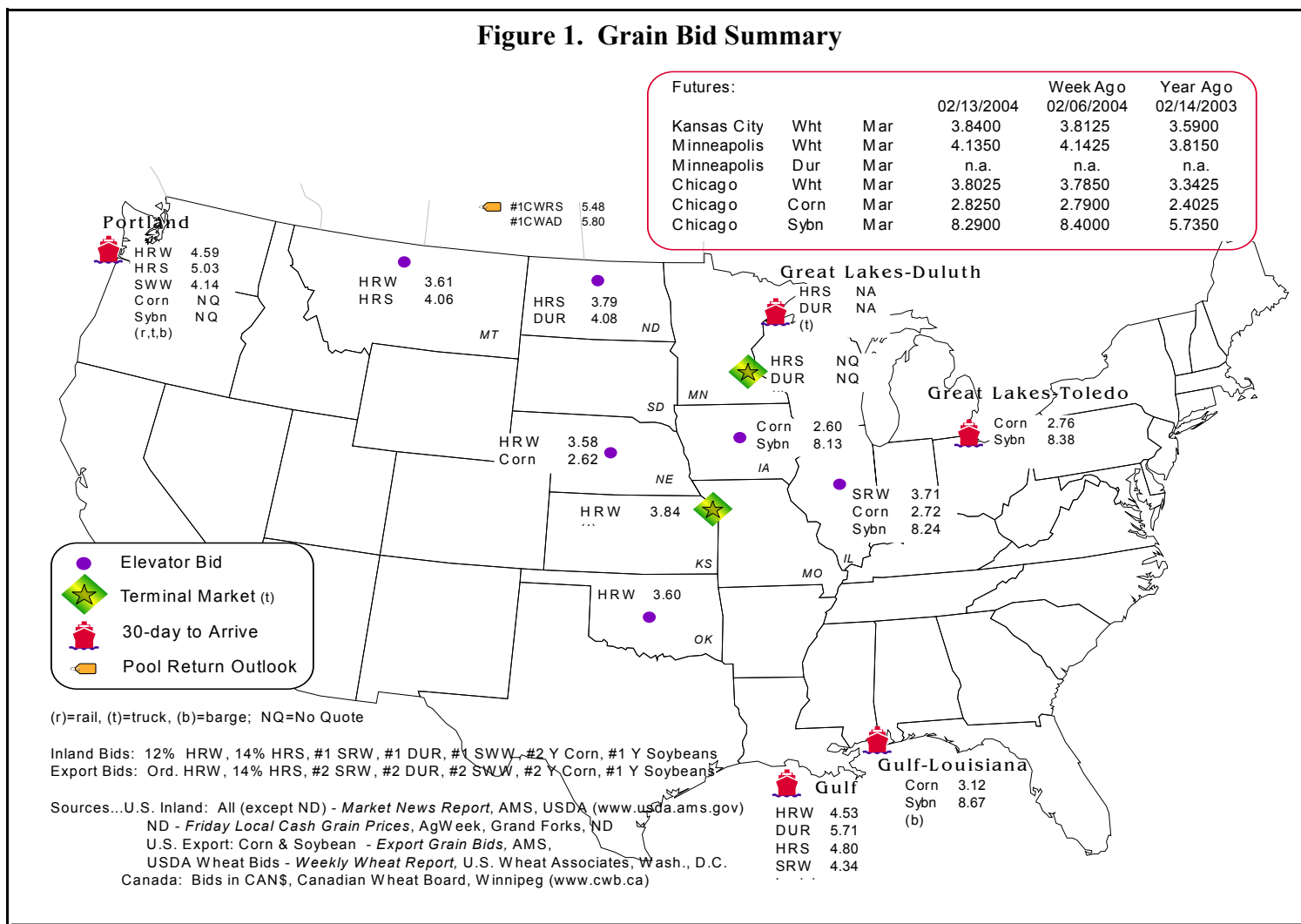
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The Grain Transportation Report is a weekly news source for grain logistics. Detailed data and trend information on five major modes: barge, truck, rail, container, and vessel, provide timely insight into grain transport. The report is offered to policymakers and industry as a tool in day-to-day decision making and longer-term strategic planning for an effective and efficient U.S. grain logistics system.

Table 1-- Market update: U.S. origins to export position price spreads (per bushel)

Commodity	Origin--Destination	This week	Last week
Corn	IL -- Gulf	-0.40	-0.44
Corn	NE -- Gulf	-0.50	-0.64
Soybean	IA -- Gulf	-0.54	-0.63
HRW	KS -- Gulf	-0.69	-0.68
HRS	ND -- Portland	-1.24	-1.34

The **Grain Bid Summary** illustrates the market relationships for commodities. Positive and negative adjustments in differential between terminal and futures markets, and the relationship to inland market points, are indicators of changes in fundamental market supply and demand. The map may be used to monitor market and time differentials.

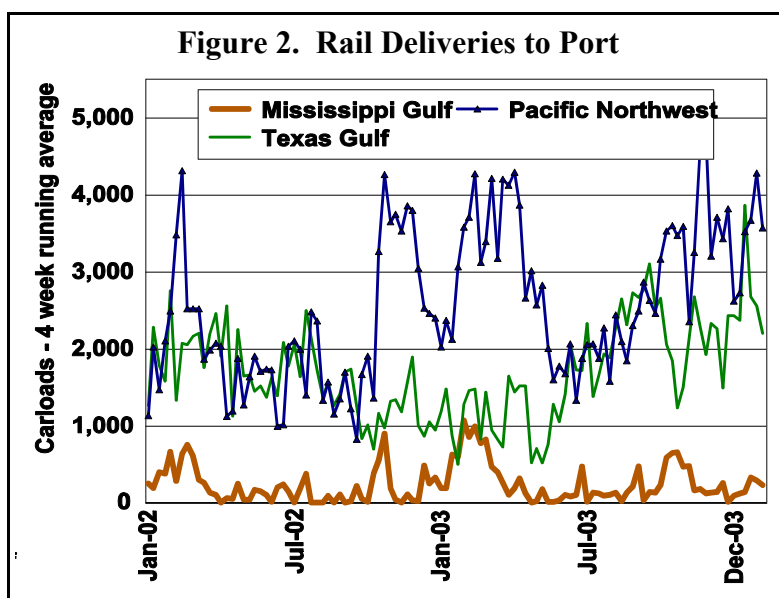
Figure 1. Grain Bid Summary

RAIL TRANSPORTATION

Table 2--Rail deliveries to port (carloads)

	Mississippi Gulf*	Texas Gulf	Pacific Northwest	Atlantic & East Gulf	Total
Week Ending:					
02/04/04	230	3,731	3,573	141	7,675
02/11/04	364	2,332	4,530	651	7,877
2004 YTD	1,483	17,550	22,320	2,139	43,492
2003 YTD	3,552	6,806	16,882	4,435	31,675
% 2003 YTD	42%	258%	132%	48%	137%
Total 2003	15,026	90,552	153,151	20,746	279,475
Total 2002	11,127	85,822	113,857	21,562	232,368

Source: Transportation & Marketing/AMS/USDA; (*) Incomplete Data



Railroads originate approximately 40% of U.S. grain shipments. Trends in these loadings are indicative of market conditions and expectations.

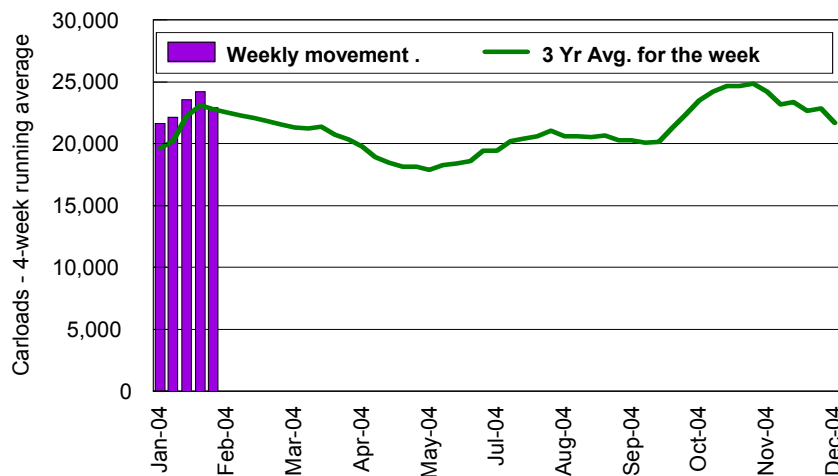
Figure 3. Total U.S. Grain Car Loadings for Class I Railroads

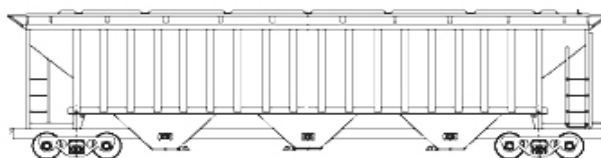
Table 3--Class I rail carrier grain car bulletin (Grain carloads originated)

	East		West			U.S. Total	Canada	
	CSXT	NS	BNSF	KCS	UP		CN	CP
02/07/04	2,610	3,294	7,452	528	5,773	19,657	4,376	2,476
This Week Last Year	2,984	3,417	6,918	279	7,025	20,623	3,487	3,942
2004 YTD	15,340	18,028	46,207	3,273	33,676	116,524	22,558	17,101
2003 YTD	15,415	17,228	39,052	2,001	34,366	108,062	17,367	17,221
% 2003 YTD	100%	105%	118%	164%	98%	108%	130%	99%
2003 Total	149,389	174,338	425,035	24,859	340,993	1,114,614	202,294	201,729

U.S. rail covered hopper cars online index*

Jan-04	95.0	102.7	93.8	92.4	95.4	96.0
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Source: Association of American Railroads; *Base Year =2001, Index based on Number of Covered Hopper Cars Online (available for Service).

**Table 4--Tariff rail rates for unit train shipments***

Date effective	Commodity	Origin	Destination	Rate per car	Rate per MT	Rate/per bushel**
02/05/04	Wheat	Kansas City, MO	Galveston, TX	\$1,820	\$20.06	\$0.55
02/05/04	Wheat	Minneapolis, MN	Portland, OR	\$4,148	\$45.72	\$1.24
02/05/04	Wheat	St. Louis, MO	Houston, TX	\$1,945	\$21.44	\$0.58
02/05/04	Wheat	Kansas City, MO	Laredo, TX	\$2,280	\$25.13	\$0.68
02/05/04	Wheat	Chicago, IL	Albany, NY	\$1,834	\$20.22	\$0.55
02/05/04	Corn	Minneapolis, MN	Portland, OR	\$3,240	\$35.71	\$0.91
02/05/04	Corn	Chicago, IL	Baton Rouge, LA	\$2,736	\$30.16	\$0.77
02/05/04	Corn	Council Bluffs, IA	Baton Rouge, LA	\$2,170	\$23.92	\$0.61
02/05/04	Corn	Evansville, IN	Raleigh, NC	\$1,841	\$20.29	\$0.52
02/05/04	Corn	Des Moines, IA	Laredo, TX	\$2,864	\$31.57	\$0.80
02/05/04	Soybean	Minneapolis, MN	Portland, OR	\$3,110	\$34.28	\$0.93
02/05/04	Soybeans	Chicago, IL	Baton Rouge, LA	\$2,736	\$30.16	\$0.82
02/05/04	Soybeans	Council Bluffs, IA	Baton Rouge, LA	\$2,799	\$30.85	\$0.84
02/05/04	Soybeans	Des Moines, IA	Laredo, TX	\$2,864	\$31.57	\$0.86
02/05/04	Soybeans	Evansville, IN	Raleigh, NC	\$1,841	\$20.29	\$0.55

Sources: www.bnsf.com, www.cpr.ca, www.csx.com, www.uprr.com

*A unit train refers to shipments of at least 52 cars.

**Approximate load per car = 100 tons: Corn 56 lbs/bu, Wheat & Soybeans 60 lbs/bu*

Table 5--Secondary rail car market,
Average premium/discount to tariff, \$/car - last week

	Delivery Period			
	Mar-04	Apr-04	May-04	Jun-04
BNSF-GF	\$179	\$85	\$46	\$39
UP-Pool	\$259	\$162	\$82	\$58

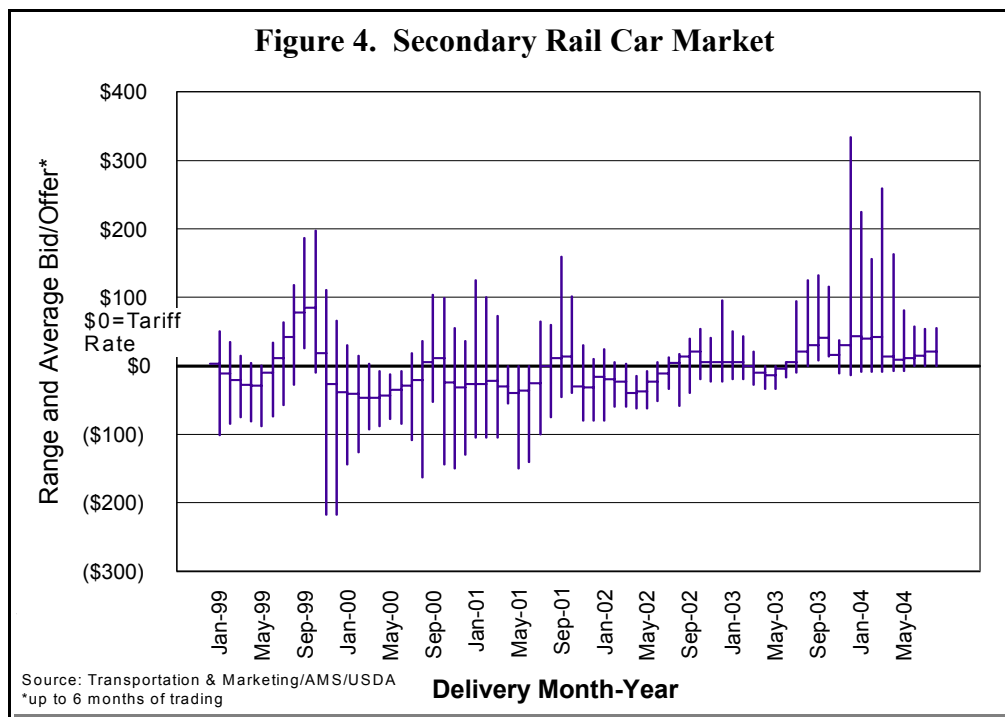
Rail service may be ordered directly from the railroad via **Auction** for guaranteed service or tariff for non-guaranteed service, or through the secondary market. The **Secondary Rail Market** information reflects trade values for service that was originally purchased from the railroad carrier as some form of guaranteed freight. The auction and secondary rail values are indicators of rail service quality and demand/supply.

Table 6--Railroad car 'Auction' results
Average premium/discount to tariff, \$/car - last auction

Delivery for:	Mar-04	Apr-04	May-04
COT/N. Grain	no offer	no offer	no offer
COT/S. Grain	no offer	no offer	no offer
GCAS/Region 1	no offer	\$80	\$80
GCAS/Region 2	no offer	\$190	\$79

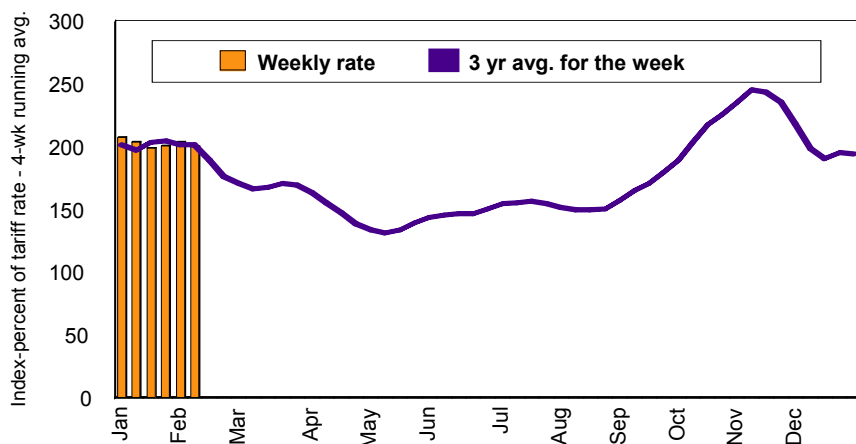
Source: Transportation & Marketing/AMS/USDA.

COT=Certificate of Transportation; GCAS=Grain Car Allocation System



BARGE TRANSPORTATION

Figure 5. Illinois River Barge Rate Index - Rate Quotes



The **Illinois River Barge Rate Index** averaged 183% of the Benchmark Tariff Rate between 1999 and 2001, based on weekly market quotes. The **Index**, along with **Rate Quotes** and **Futures Market** bids are indicators of grain transport supply and demand.

Calculating **Barge Rate** Per Ton:
 $\text{Index} \times 1976 \text{ Tariff Benchmark Rate per Ton}$

Select applicable index from market quotes included in tables on this page. The 1976 benchmark rates per ton are provided in map below.

Table 7-- Barge rate quotes: Southbound barge freight
 Index=percent of tariff, based on 1976 tariff benchmark rate

Location	2/11/04	2/4/04	Mar '04	May '04
Twin Cities	nq	nq	nq	192
Mid-Mississippi	nq	nq	187	167
Illinois River	183	214	167	153
St. Louis	135	147	144	139
Lower Ohio	134	151	141	136
Cairo-Memphis	118	127	123	123

Source: Transportation & Marketing/AMS/USDA, nq= no quote

Table 8--Barge futures market

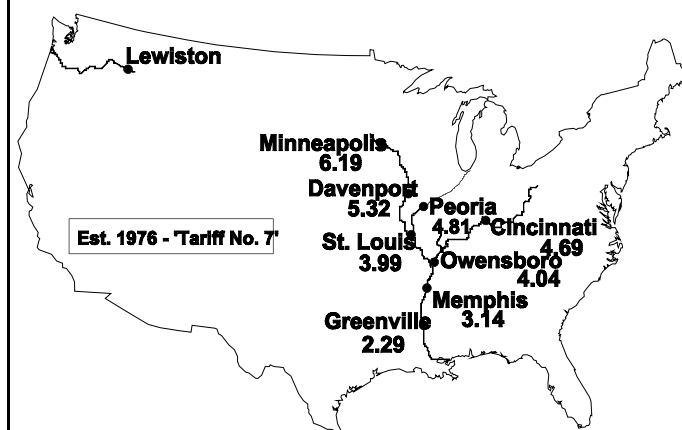
Southbound barge freight nominal/cash basis values

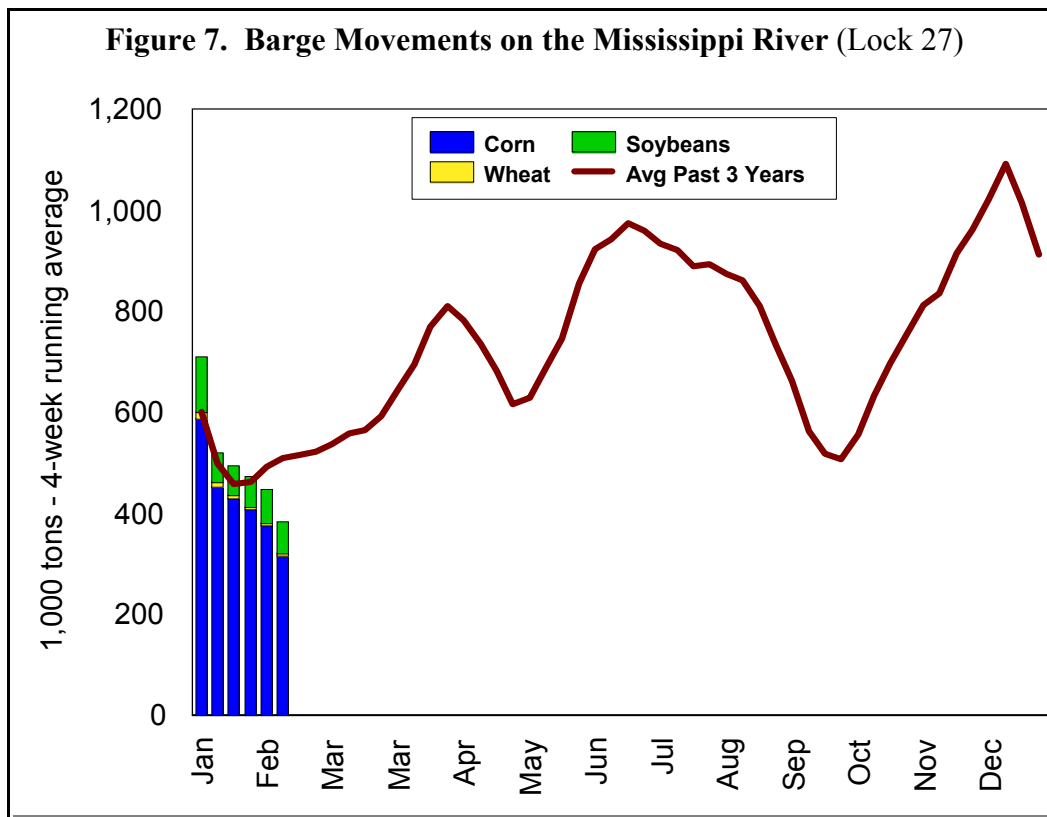
Index=percent of tariff, based on 1976 tariff benchmark rate

Week ended	River/region	Contract period	Rate	
			futures	cash
02/17/04	St. Louis	Mar.	n/a	150
		May	n/a	145
		July	n/a	155
		Sep.	n/a	190
		Oct.	n/a	225
	Illinois River	Mar.	n/a	173
		May	n/a	155
		July	n/a	163
		Sep.	n/a	203
		Oct.	n/a	225

Source: St. Louis Merchants Exchange

Figure 6. Benchmark Tariff Rates



**Table 9--Barge grain movements (1,000 tons)**

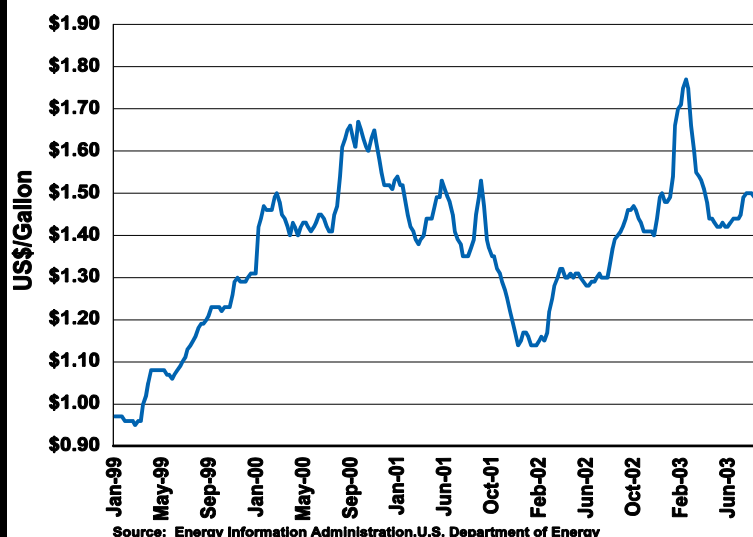
Week ending 2/7/04	Corn	Wht	Sybn	Total
Mississippi River				
Rock Island, IL (L15)	0	0	0	0
Winfield, MO (L25)	0	0	0	0
Alton, IL (L26)	174	6	39	221
Granite City, IL (L27)	178	6	39	226
Illinois River (L8)	119	6	13	139
Ohio River (L52)	155	14	75	269
Arkansas River (L1)	0	38	16	53
2004 YTD	2,837	238	969	4,167
2003 YTD	2,642	196	1,641	4,649
% 2003 YTD	107%	121%	59%	90%
2003 Total	29,898	2,787	9,146	42,526

Source: U.S. Army Corp of Engineers

YTD and Calendar year total includes Miss/27, Ohio/52 and Ark/1.

TRUCK TRANSPORTATION

Figure 8. Weekly U.S. Retail Road Diesel Price



The weekly **Diesel Price** provides a proxy for trends in U.S. truck rates. Diesel fuel is a significant expense for truck grain movements, accounting for 37% of the estimated variable cost. **Crude Oil Price** is an indicator in future diesel price trends.

Light Sweet Crude is exchanged on the New York Mercantile Exchange. North Sea oil has a "benchmark" role in crude oil pricing. Brent crude, a blend of North Sea oils, is traded on the International Petroleum Exchange in London.

Figure 9. Weekly Brent Crude Price, Friday Close



Table 10--Crude oil prices (US\$ per Barrel)-02/17/04

Type	This week	Last week	Change
Light Sweet Crude (NYMEX)	34.54	32.80	↑
Brent Crude	30.96	n/a	n/a

Source: U.S. Department of Energy, www.eia.doe.gov; *U.S. Refiner Crude Acquisition Cost, Composite Domestic & Import

GRAIN EXPORTS

Table 11--U.S. export balances (1,000 Metric Tons)

Unshipped export balance	Wheat					All Wheat	Corn	Soybean	Total
	HRW	SRW	HRS	SWW	DUR				
02/05/04	2,759	1,956	1,292	1,078	198	7,283	9,498	7,038	23,819
This Week Year Ago	1,131	493	1,123	597	95	3,438	5,029	6,089	14,556
Cumulative Exports-Crop Year									
2003/04 YTD	8,686	2,536	4,645	3,264	742	19,870	21,092	17,889	58,851
2002/03 YTD	5,177	2,150	4,742	2,491	559	15,119	17,793	17,519	50,431
% 2002/03 YTD	168%	118%	98%	131%	133%	131%	119%	102%	117%
2001/02 Total	8,761	5,485	5,582	3,175	1,133	24,135	48,003	29,926	102,064
2000/01 Total	9,314	4,445	5,775	5,156	1,130	25,819	47,734	27,567	101,120

Source: Foreign Agricultural Service/USDA; YTD: Year-to-Date; Crop Year: Wheat=6/01-5/31, Corn & Soybeans=9/01-8/31

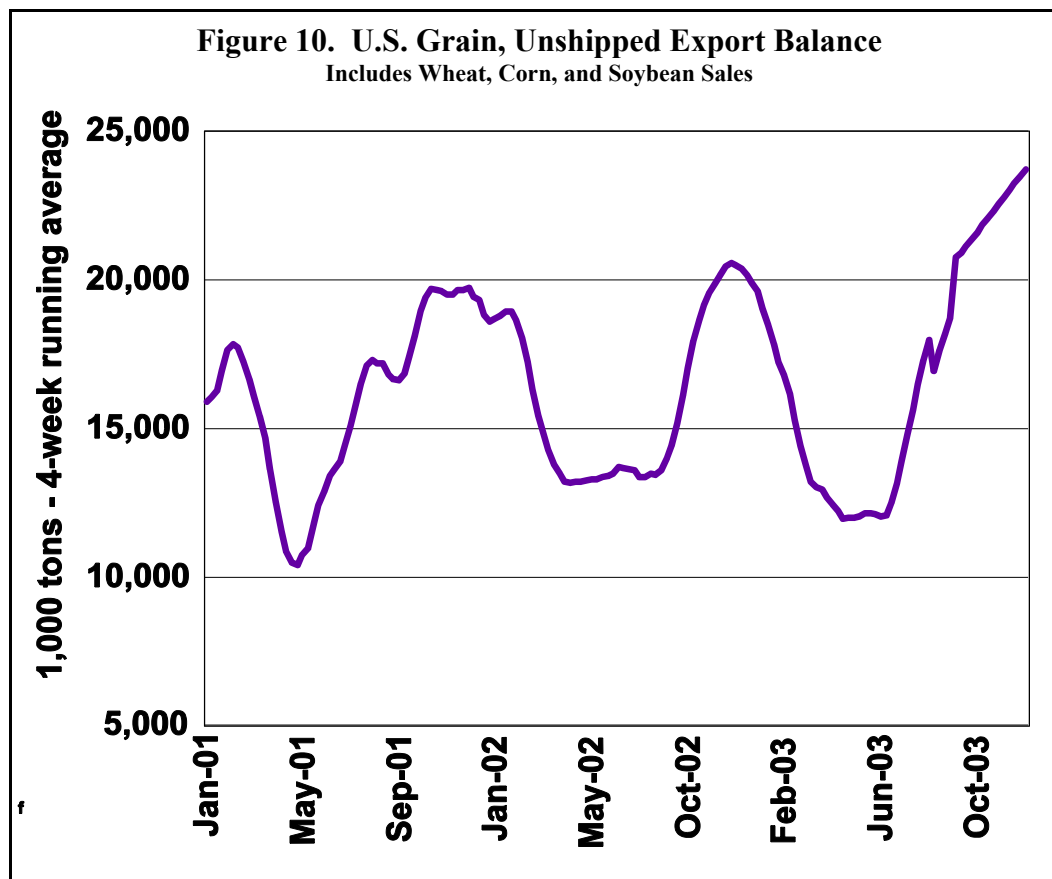
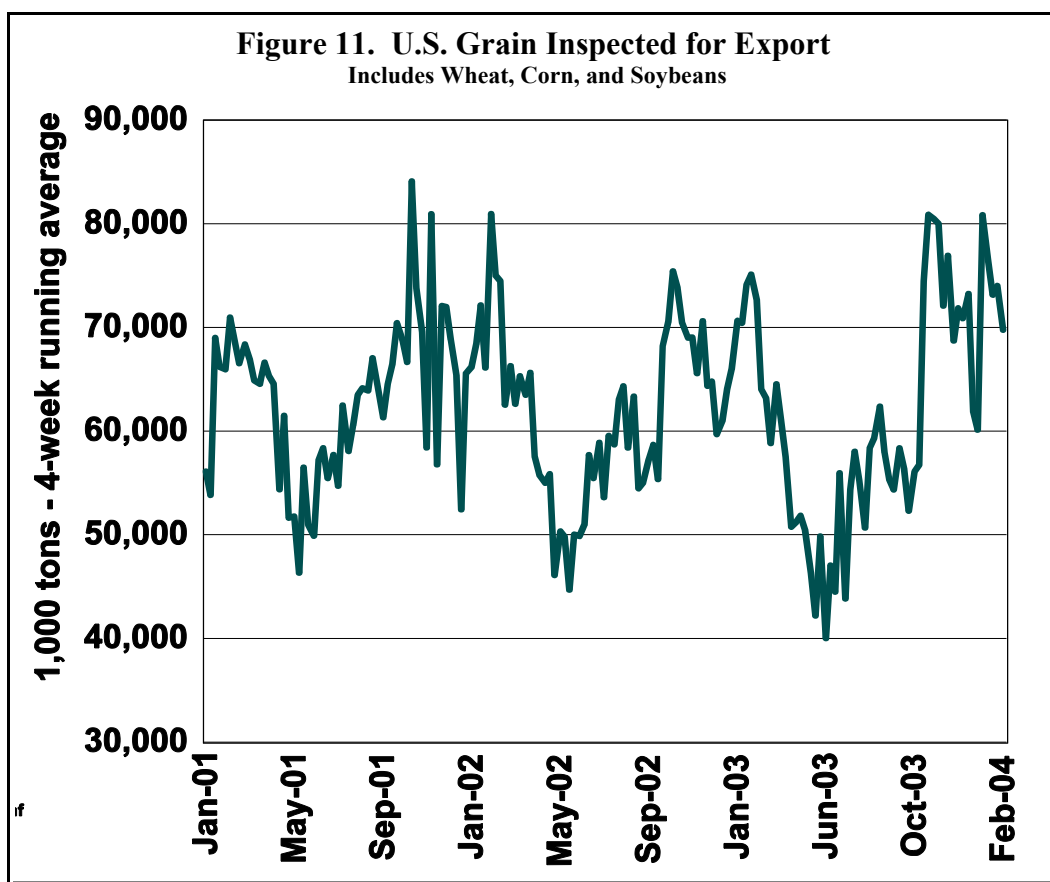


Table 12--Select U.S. port regions - grain inspections for export (1,000 metric tons)

Date	<u>Pacific Region</u>			<u>Mississippi Gulf</u>			<u>Texas Gulf</u>			<u>Port Region Total</u>		
	<i>Wheat</i>	<i>Corn</i>	<i>Soybn</i>	<i>Wheat</i>	<i>Corn</i>	<i>Soybn</i>	<i>Wheat</i>	<i>Corn</i>	<i>Soybn</i>	<i>Pacific</i>	<i>Mississippi</i>	<i>Texas</i>
02/12/04	263	221	123	148	410	453	204	0	0	608	1,011	204
2004 YTD	1,720	984	877	857	4,782	3,439	1,590	42	0	3,582	9,079	1,632
2003 YTD	938	784	757	806	3,956	5,390	603	8	11	2,479	10,151	622
% 2003 YTD	183%	125%	0%	106%	121%	64%	264%	524%	0%	144%	89%	263%
2003 Total	8,764	5,450	5,114	5,855	30,352	18,972	7,032	746	348	19,328	55,179	8,125

Source: Federal Grain Inspection Service YTD-Year-to-Date



The U.S. Exports Approximately One-Quarter of the Grain it Produces. On average, it includes nearly 45% of U.S. grown wheat, 35% of U.S. grown soybeans, and 20% of the U.S. grown corn.

Over 60% of these U.S. export grain shipments departed through Louisiana Gulf region in 2002.

Figure 12. Gulf Port Grain Vessel Loading
Past 7 Days

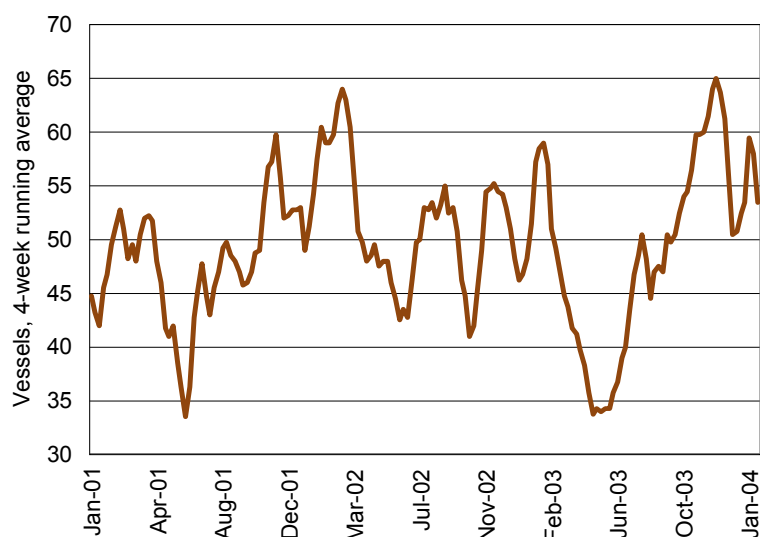


Table 13--Weekly port region grain ocean vessel activity (number of vessels)

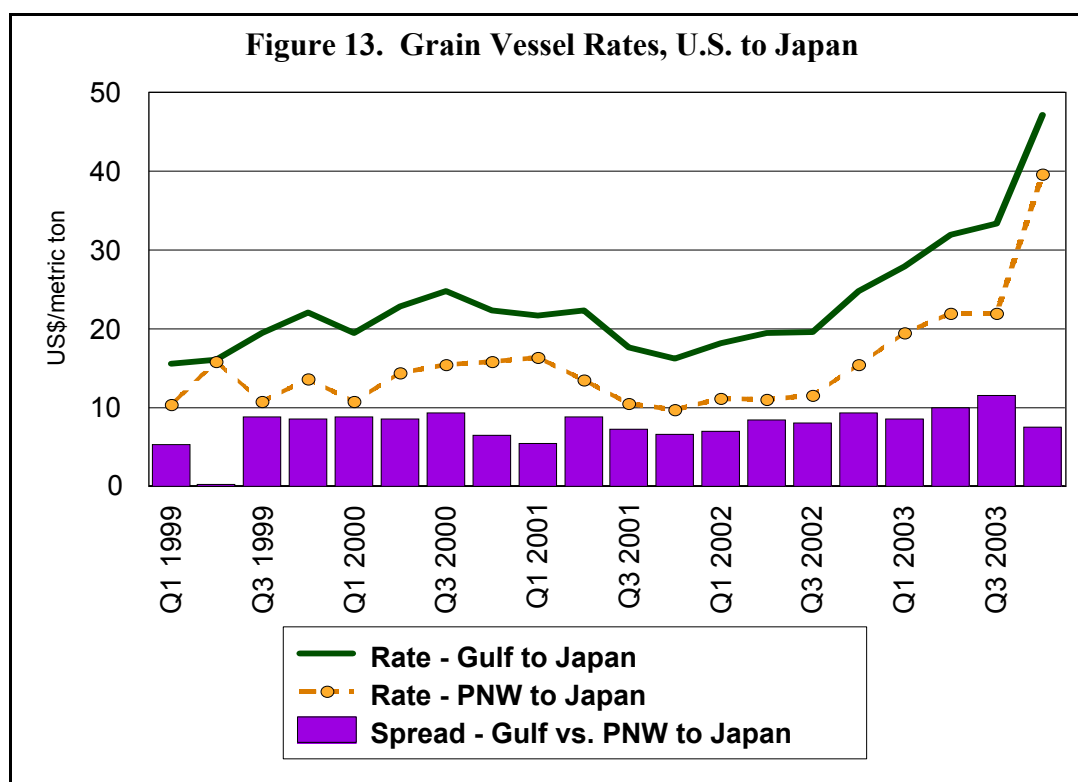
Date	Gulf			Pacific Northwest	Vancouver_B.C.
	<u>In Port</u>	<u>Loaded 7-Days</u>	<u>Due Next 10-Days</u>	<u>In Port</u>	<u>In Port</u>
02/05/04	30	47	63	13	5
02/12/04	35	46	74	12	6
2003 Range	(11..47)	(30..76)	(39..93)	(3..13)	(1..15)
2003 Avg	31	49	62	9	6

Source: Transportation & Marketing/AMS/ USDA

Table 14--Quarterly ocean freight rates (average rates & percentage changes, U.S. dollars/metric ton)

				2003 4 th Qtr	2002 4 th Qtr	Change %	
<u>Gulf to</u>							
Japan	\$41.83	\$24.75	69%	<u>Pacific NW to</u>			
Taiwan	\$44.00	-	-	Japan	-	\$15.39	-
N. Europe	-	\$18.07	-	<u>Argentina/Brazil to</u>			
N. Africa	\$35.00	\$18.33	91%	Med. Sea	\$38.50	\$22.00	75%
Med. Sea	\$31.75	-	-	N. Europe	-	\$22.63	-

Source: Maritime Research, Inc.



Source: The Baltic Exchange

Table 15--Ocean freight rates for selected shipments
Week Ending 02/14/04

Export region	Import region	Grain	Month	Volume loaded (Tons)	Freight rate (\$/ton)
U.S. Gulf	Peru	Grain	Mar 9/18	9,710	\$55.59*
U.S. Gulf	Taiwan	Hvy Grain	Mar 10/20	56,000	\$68.00
U.S. Gulf	China	Hvy Grain	Feb 5/14	55,000	\$60.00
U.S. Gulf	S. Africa	Sorghum	Jan 26/Feb 5	20,000	\$49.50
U.S. Gulf	Haiti	Wheat	Feb 17/27	8,500	\$53.89*

Source: Maritime Research Inc.

Rates shown are for metric ton (2,204.62 lbs.=one metric ton), F.O.B., except where otherwise indicated; op=option

*Most food aid from the United States is required to be shipped on U.S. flag vessels. The vessels are of limited availability resulting in higher rates. In addition, destinations receiving food aid generally lack adequate port unloading facilities, requiring the vessel to remain in port for a longer duration than normal.

CONTAINER

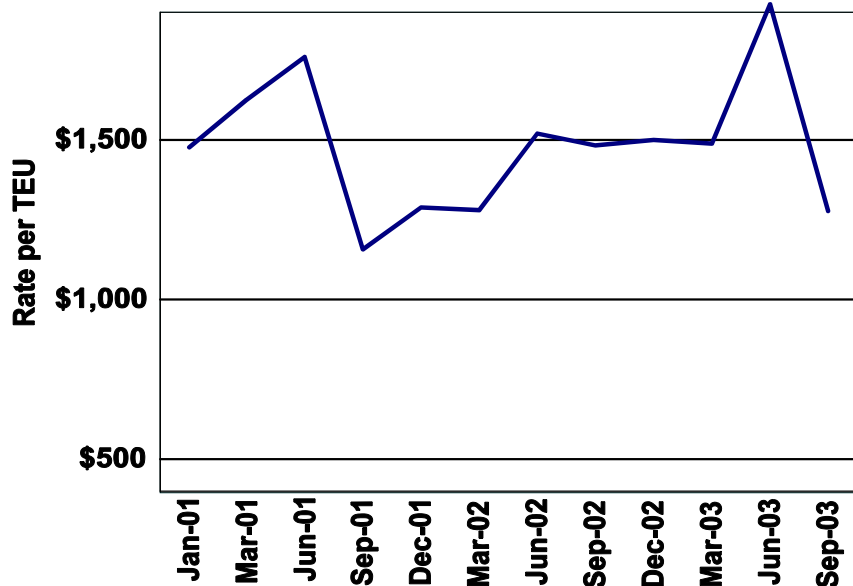
Container Ocean Freight Rates

Average rate per twenty-equivalent-unit (TEU), weighed by shipping line market share

Source: Transportation & Marketing/AMS/USDA, Quarterly Updates

Figure 14. Container Rates - Soybeans

Seattle, WA Origin to Tokyo, Japan



Approximately 420,000 MT of grain and oilseed exports were marketed via container in 2001. This volume increased 26% compared to 1997.

Figure 15. Container Rates - Feed Grain

Seattle, WA Origin to Selected Destinations

